## Remarks

In the Office Action mailed November 6, 2003:

1.  Claims 1, 11 and 20 were objected to because of informalities;

2.  Claims 1, 4, 6, 8, 9, 11-12 and 14-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,737,531 (Ehley);

3.  Claims 2, 3 and 10 were rejected under 35 U.S.C. § 103(a) in view of Ehley;

4.  Claims 5, 7 and 13 were objected to, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

I.  ## Informalities

Claims 1, 11 and 20 have been amended to correct the noted errors.

II.  ## Ehley (U.S. Patent 5,737,531)

Ehley is directed to the synchronization of media streams through the use of feedback from a target to a source of the streams (column 5, lines 54-59). Resynchronization in Ehley differs significantly from the method and apparatus of Applicants' present invention.

### A. In Ehley, Loss of Synchronization is Detected at a *Client*

Ehley's method of resynchronization depends on feedback provided by a client. This is evident in passages cited by the Examiner relating to Figure 7 (e.g., column 11, lines 13-23; column 11, lines 30-33; column 11, lines 54-59). Figure 7 "illustrates the client software and hardware architecture" (column 6, lines 35-36).

In contrast, the present invention relates to operations performed at a server. For example, "a media streaming *server* may determine that a streamed media program is out of synchronization" (page 2, lines 25-26; emphasis added).

As just one consequence of this difference between Ehley and the present application, in Ehley, a large number of clients may overwhelm a server with identical or substantially identical feedback if they are all out of synchronization. In the present invention, the server would notice the loss of synchronization without having to ingest such a large amount of feedback.

**B.     Ehley's Method of Resynchronization Differs Significantly from Applicants'**

An examination of the Ehley resynchronization method reveals that it is quite different from Applicants' claimed methods. In particular, Ehley discusses resynchronization between a master stream and a slave stream on a client (column 5, line 66 to column 6, line 3). Ehley describes two methods of accomplishing the resynchronization, depending on whether the slave track is behind or ahead of the master track.

If the slave track is behind the master track, the client sends a message to the server telling it to drop a number of frames (column 11, line 66 to column 12, line 1; element 802 of Figure 8; column 13, lines 33-49). This obviously does not involve "selecting a second time index later in said media," as recited in Applicants' claim 1.

If the slave stream is ahead of the master track, a wake-up time for the slave stream is increased to slow the slave stream (column 11, lines 49-54). This causes the next frame in the slave stream to be processed at a slightly later time than it would be processed otherwise. This, however, is very different from Applicants' method of attempting to resynchronize at a later media time index.

To illustrate the difference, assume that Ehley's system plays a particular frame (e.g., frame A). Following a loss of synchronization, where the *client* detects that the slave stream is ahead of the master stream, Ehley simply plays frame A+1 at a slightly later time than it would have otherwise. The media time index has not changed and no "second media time index" was selected for resynchronization. In Applicants' present invention, when the *server* detects a loss of synchronization after frame A, it selects a second, later, media time index (e.g., A+B) and attempts to resynchronize at that media time index.

III.    Selected Claims

A.     **Claims 1-7 and 16**

Claims 1 and 16 have been amended to make it clearer that the claimed method is performed at a server, rather than a client. As described above in section II.A, Ehley does not teach or suggest the detection of a loss of synchronization at a server.

## 1. Dropping frames is not equivalent to selecting a second media time index

The Examiner cited several portions of Ehley (column 12, lines 59-61; column 13, lines 39-59; element 802A of Figure 8; claim 1) as evidence of Ehley's anticipation of the "selecting a second media time index" element of claims 1 and 16. However, *dropping* a number of frames in a stream that is chronically behind a master stream is <u>not</u> the same as *selecting* a media time index. The "media time index" refers to the position in the overall media stream that <u>should</u> be played. Dropping frames from the slave stream does nothing to alter the media time index; it merely attempts to get the slave stream back to the *current* media time index.

In addition, and as described in section II.A, in Ehley it is the <u>client</u> that determines the number of frames to drop. Therefore, even if dropping frames was equivalent to selecting a later media time index, it is not the <u>server</u> that performs this action.

## 2. Ehley does not attempt to resynchronize at a later media time index

Because dropping frames is not equivalent to selecting a later media time index at which to resynchronize, Ehley does not teach or suggest such an attempt to resynchronize. Ehley merely tries to get a slower slave track to speed up and resynchronize at the *current* media time index.

## B. Claims 8-15 and 17

Claims 8 and 17 have been amended to make it clearer that the claimed method is performed at a server, rather than a client. As described above in section II.A, Ehley does not teach or suggest the detection of a loss of synchronization at a server.

Applicants traverse the rejection of claims 8 and 17 for the same reasons as stated above in section III.A, and for other reasons.

## 1. Ehley does not halt the streaming of a media program

Ehley's dropping of frames (column 11, line 66 to column 12, line 3) does not halt streaming. Instead, by dropping a number of frames from a slave stream when it is "chronically behind" the master stream, the system attempts to catch the slave stream up to the master stream. Therefore, it would not <u>stop</u>. Instead, it keeps streaming frames – the frames immediately following the ones that are dropped.

## C. Claim 18

Claim 18 has been amended to make it clearer that the apparatus is a server, not a client, in the embodiment of the invention recited in this claim. As described above in section II.A, Ehley does not teach or suggest the detection of a loss of synchronization at a server.

## D. Claims 19-20

Claims 19-20 have been amended to claim a media server, and not a client. As described above in section II.A, Ehley does not teach or suggest the detection of a loss of synchronization at a server.

## CONCLUSION

No new matter has been added with the preceding amendments. It is submitted that the application is in suitable condition for allowance. Such action is respectfully requested. If prosecution of this application may be facilitated through a telephone interview, the Examiner is invited to contact Applicant's attorney identified below.

Respectfully submitted,

Date: January 9, 2004            By:  _____        42,199
                                       Daniel E. Vaughan          (Registration No.)

**Park, Vaughan & Fleming LLP**
702 Marshall Street, Suite 310
Redwood City, CA 94063
(650) 474-1973: voice
(650) 474-1976: facsimile